



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/038,112	12/31/2001	John J. Egan	361331-506	5381

30623 7590 06/17/2004

MINTZ, LEVIN, COHN, FERRIS, GLOVSKY
AND POPEO, P.C.
ONE FINANCIAL CENTER
BOSTON, MA 02111

EXAMINER

DELACROIX MUIRHEI, CYBILLE

ART UNIT

PAPER NUMBER

1614

DATE MAILED: 06/17/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/038,112	Applicant(s) EGAN ET AL.	
	Examiner Cybille Delacroix-Muirheid	Art Unit 1614	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) 3,5,6,10 and 12 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,4,7-9 and 11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 December 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Art Unit: 1614

Detailed Action

The following is responsive to Applicant's election received March 16, 2004.

Applicant's election of 3-(2-phenyl-2-oxoethyl)-4,5-dimethyl-thiazolium chloride with traverse is acknowledged. Since, Applicant has not specifically pointed out the supposed errors in the election requirement, the election is being maintained for reasons already of record.

Claims 3, 5, 6, 10, 12 are withdrawn from consideration.

Claim Objection(s)

1. Claims 1 and 8 are objected to because of the following informalities: in claim 1, lines 17-23, the {...} should be deleted and replaced with punctuation, i.e. --;-- or --,--. Additionally at lines 22-23, the "(...)" should also be deleted and replaced with punctuation. Also, in claim 1, page 65, line 5, the "(...)" should be deleted and replaced with punctuation. In claim 8, page 68, lines 6-12, the {...} should be deleted and replaced with punctuation, i.e. --;-- or --,--. Additionally at lines 11-12 and on page 69, line 13, the "(...)" should also be deleted and replaced with punctuation. Appropriate correction is required.

Claim Rejections—35 USC 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains.

Art Unit: 1614

Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

2. Claims 1, 2, 4, 7, 8, 9, 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cerami et al., RE38,330 E in view of EPA 0 458 589 A1 ('589).

Cerami et al. disclose a method of inhibiting and reversing protein aging by administering to a patient in need thereof an effective amount of a thiazolium compound represented by Formula (I). Specifically, Cerami et al. teach that the method has therapeutic applications and that the thiazolium compound can be used in a method for treating lens proteins susceptible to aging. A preferred compound used in the

Art Unit: 1614

therapeutic method is 3-(2-phenyl-2-oxoethyl)-4,5-dimethyl-thiazolium bromide. For topical or dermal application to the eye, the compound may be formulated with acceptable excipients into a lotion or ointment. The compositions for ocular administration may contain up to about 10% of the compound and may administer an effective amount (up to about 30 mg/kg) to a patient's eye. Finally, Cerami et al. teach that pharmaceutically acceptable salts of the compounds may also be used in the disclosed method. Please see the abstract; col. 5, lines 28-55; col. 9, lines 5-10; col. 10, lines 36-53; claim 153; 163.

Cerami et al. do not specifically disclose administering the elected compound 3-(2-phenyl-2-oxoethyl)-4,5-dimethyl-thiazolium chloride; however, the Examiner refers to col. 5, lines 28-29, where Cerami et al. teach that the halo atom used in the thiazolium compounds may also be chloride.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to administer 3-(2-phenyl-2-oxoethyl)-4,5-dimethyl-thiazolium chloride because, in view of Cerami et al.'s teaching, one of ordinary skill in the art would reasonably expect the chloride compound to be effective in treating lens proteins susceptible to aging. Such a modification would have been motivated by the reasonable expectation that the chloride compound would have similar properties, and thus the same use as the bromide compound.

With respect to the claimed method of "improving ocular accommodation" or decreasing intraocular pressure", this would have been obvious, if not inherent, from the

Art Unit: 1614

disclosed method which discloses administration of identical active agents in identical dosage amounts to a host in need thereof using Applicant's claimed method steps:

Finally, concerning claim 7, which requires the further administration of a cholinergic agent to the eye, the Examiner refers to EPA '589, which discloses a method of lowering ocular pressure in a patient suffering from ocular hypertension by administering to the patient an effective amount of a composition containing a prostaglandin and a cholinergic agent. Please see the abstract; page 7, lines 5-8.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method of Cerami et al. to additionally include the administration of a cholinergic agent because one of ordinary skill in the art would reasonably expect the ocular compositions containing an additional cholinergic agent to reduce any ocular hypertension suffered by the patients in Cerami et al.

Conclusion

Claims 1, 2, 4, 7, 8, 9, 11 are rejected.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cybille Delacroix-Muirheid whose telephone number is 571-272-0572. The examiner can normally be reached on Mon-Fri from 9:30 to 6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marianne Seidel, can be reached at 571-272-0584. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 1614

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

CDM



June 12, 2004



Cybille Delacroix-Muirheid
Patent Examiner Group 1600